

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Previously Presented) A liquid processing apparatus, in which a process liquid is supplied to a substrate for performing a liquid processing, comprising:

a substrate rotating device including a holder for holding a substrate and ~~a rotating device~~
a motor for rotating said holder;

a process chamber for applying said liquid processing to the substrate held substantially vertical by said holder;

a posture changing mechanism located outside of the process chamber for changing the posture of said substrate rotating device outside of said process chamber such that a state of the substrate held by said holder changes between substantially vertical and substantially horizontal;
and

a position adjusting mechanism for relatively adjusting the positions of said process chamber and said substrate rotating device such that said holder is housed in said process chamber.

2. (Previously Presented) A liquid processing apparatus, in which a process liquid is supplied to a substrate for performing a liquid processing, comprising:

a substrate rotating device including a holder for holding a substrate and a motor for rotating said holder;

a process chamber for applying said liquid processing to the substrate held substantially vertical by said holder;

a posture changing mechanism located outside of the process chamber for changing the posture of said substrate rotating device outside of said process chamber such that a state of the substrate held by said holder changes between substantially vertical and substantially horizontal;

a position adjusting mechanism for relatively adjusting the positions of said process chamber and said substrate rotating device together with said posture changing mechanism such that said holder is housed in said process chamber.

3. (Previously Presented) A liquid processing apparatus according to claim 2, wherein said holder is shaped to hold a single substrate.

4. (Previously Presented) A liquid processing apparatus, in which a process liquid is supplied to a substrate for performing a liquid processing, comprising:

a substrate rotating device including a holder for holding a substrate and a rotating device for rotating said holder;

a posture changing mechanism for changing the posture of said substrate rotating device such that a state of the substrate held by said holder changes between substantially vertical and substantially horizontal;

a process chamber for applying said liquid processing to the substrate held substantially vertical by said holder; and

a position adjusting mechanism for relatively adjusting the positions of said process chamber and said holder such that said holder is housed in said process chamber,

wherein said process chamber is of a double wall structure comprising an outside chamber and an inside chamber movable between the process position within said outside chamber and the retreat position outside said outside chamber.

5. (Original) A liquid processing apparatus according to claim 3, further comprising a container delivery section for performing the delivery of a container having a plurality of substrates housed therein substantially horizontal a predetermined distance apart from each other and a substrate transfer device for transferring the substrate in substantially a horizontal state between the container disposed in said container delivery section and said holder.

6. (Previously Presented) A liquid processing apparatus according to claim 5, wherein said substrate transfer device includes a transfer arm for transferring the unprocessed substrates and another transfer arm for transferring the processed substrates.

7. (Original) A liquid processing apparatus according to claim 5, comprising a plurality of said process chambers and a plurality of said substrate rotating devices, said substrate transfer device including a moving mechanism for gaining access to said plural substrate rotating device.

8. (Previously Presented) A liquid processing apparatus according to claim 2, wherein said holder is shaped to hold substantially in parallel a plurality of substrates.

9. (Previously Presented) A liquid processing apparatus, in which a process liquid is supplied to a substrate for performing a liquid processing, comprising:

a substrate rotating device including a holder for holding a substrate and a rotating device for rotating said holder;

a posture changing mechanism for changing the posture of said substrate rotating device such that a state of the substrate held by said holder changes between substantially vertical and substantially horizontal;

a process chamber for applying said liquid processing to the substrate held substantially vertical by said holder; and

a position adjusting mechanism for relatively adjusting the positions of said process chamber and said holder such that said holder is housed in said process chamber,

wherein said holder holds substantially in parallel a plurality of substrates, and

wherein said process chamber is of a double wall structure comprising an outside chamber and an inside chamber movable between the process position within said outside chamber and the retreat position outside said outside chamber.

10. (Original) A liquid processing apparatus according to claim 8, further comprising a container delivery section for performing the delivery of a container having a plurality of substrates housed therein substantially horizontal a predetermined distance apart from each other and a substrate transfer device for transferring the substrate in substantially a horizontal state between the container disposed in said container delivery section and said holder.

11. (Previously Presented) A liquid processing apparatus according to claim 10, wherein said substrate transfer device includes a plurality of transfer arms for transferring the substrates housed in the container in a single operation, each of said plural arms holding a single substrate.

12. (Previously Presented) A liquid processing apparatus according to claim 11, wherein said substrate transfer device includes a mechanism for adjusting the distance between adjacent arms of said plural transfer arms.

13. (Original) A liquid processing apparatus according to claim 10, wherein said holder is capable of holding the substrates housed in two containers in a single operation.

14-31. (Canceled)

32. (Previously Presented) The liquid processing apparatus according to claim 1, wherein said process chamber is of a double wall structure comprising an outside chamber and an inside chamber movable between the process position within said outside chamber and the retreat position outside said outside chamber.

33. (Previously Presented) A liquid processing apparatus according to claim 1, further comprising a container delivery section for performing the delivery of a container having a plurality of substrates housed therein substantially horizontal a predetermined distance apart from each other and a substrate transfer device for transferring the substrate in substantially a horizontal state between the container disposed in said container delivery section and said holder.

34. (Previously Presented) A liquid processing apparatus according to claim 33, wherein said substrate transfer device includes a transfer arm for transferring the unprocessed substrates and another transfer arm for transferring the processed substrates.

35. (Previously Presented) A liquid processing apparatus according to claim 33, comprising a plurality of said process chambers and a plurality of said substrate rotating devices, said substrate transfer device including a moving mechanism for gaining access to said plural substrate rotating device.

36. (Previously Presented) The liquid processing apparatus according to claim 3, wherein said process chamber is of a double wall structure comprising an outside chamber and an inside chamber movable between the process position within said outside chamber and the retreat position outside said outside chamber.

37. (Previously Presented) The liquid processing apparatus according to claim 8, wherein said process chamber is of a double wall structure comprising an outside chamber and an inside chamber movable between the process position within said outside chamber and the retreat position outside said outside chamber.

38. (Canceled)

39. (Previously Presented) A liquid processing apparatus, comprising:
a cleaning unit, said cleaning unit comprising:

a process chamber having a spin plate insertion port;

a wafer rotating device having a spin plate, a pivot, and a motor; and

a posture changing mechanism having a leg portion connected to a disc holding member, said disc holding member being connected to a stationary disc having a shape that covers the spin plate insertion port, said stationary disc having an opening for said pivot.